

ABSTRACT OF THE DISCLOSURE

A partial response (PR) waveform generator generates a digital value sequence of an expected PR waveform based on the output of a soft-decision Viterbi detector included in, for example, a first-stage decoder unit incorporated in an iterative decoder. The generator also generates flag information indicative of whether reliability of the digital value sequence is low or high, in parallel with the generation of the digital value sequence. An error detector detects error values in a PR equalized sample value sequence, needed for feedback control of a control target, using the digital value sequence of the expected PR waveform as a digital value sequence of a reference waveform.

An error output controller controls the output of the error values detected by the error detector in accordance with the state of the flag information generated by the generator.